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AROLYN S ELMORE				ZEMAN,R	
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

## Office Action Summary

Application No. 09/347,175

Examiner

Robert A. Zeman

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Hogle et al.



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) X Responsive to communication(s) filed on Jul 1, 1999 2a) This action is **FINAL**. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) X Claim(s) 1-57 is/are pending in the application. 4a) Of the above, claim(s) \_\_\_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. are subject to restriction and/or election requirement. 8) X Claims 1-57 Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on \_\_\_\_\_\_ is/are objected to by the Examiner. 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). a)  $\square$  All b)  $\square$  Some\* c)  $\square$  None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) 15) Notice of References Cited (PTO-892) 18) Interview Summary (PTO-413) Paper No(s). 16) Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) Notice of Informal Patent Application (PTO-152) 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20) Other:

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## **DETAILED ACTION**

## Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-6, drawn to fusion molecules comprising HDAg and at least 1 binding moiety, classified in class 424, subclass 225.1.
- II. Claims 7-10, 18 and 19, drawn to a coiled coil oligomer comprising fusion molecules, classified in class 530, subclass 350.
- III. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEQ ID NO:10, classified in class 536, subclass 23.4.
- IV. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEQ ID NO:12, classified in class 536, subclass 23.4.
- V. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEQ ID NO:13, classified in class 536, subclass 23.4.
- VI. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEO ID NO:14, classified in class 536, subclass 23.4.
- VII. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEQ ID NO:21, classified in class 536, subclass 23.4.
- VIII. Claims 11, 14, 23, 31 and 37, drawn to nucleic acid molecules, vectors and host cells comprising SEQ ID NO:23, classified in class 536, subclass 23.4.

- IX. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:1, classified in class 536, subclass 23.4.
- X. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:2, classified in class 536, subclass 23.4.
- XI. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:3, classified in class 536, subclass 23.4.
- XII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:4, classified in class 536, subclass 23.4.
- XIII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:5, classified in class 536, subclass 23.4.
- XIV. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:6, classified in class 536, subclass 23.4.

- XV. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:7, classified in class 536, subclass 23.4.
- XVI. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:8, classified in class 536, subclass 23.4.
- XVII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:11, classified in class 536, subclass 23.4.
- XVIII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:15, classified in class 536, subclass 23.4.
- XIX. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:16, classified in class 536, subclass 23.4.
- XX. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:17, classified in class 536, subclass 23.4.

- XXI. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:18, classified in class 536, subclass 23.4.
- XXII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:19, classified in class 536, subclass 23.4.
- XXIII. Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:20, classified in class 536, subclass 23.4.
- XXIV Claims 12, 15, 24, 32-33 and 38, drawn to nucleic acid molecules, vectors and host cells comprising nucleotide sequences that encode SEQ ID NO:25, classified in class 536, subclass 23.4.
- XXV. Claims 13, 22, 25-30, 34-36 and 39-40, drawn to nucleic acid molecules, vectors, host cells and methods of expressing said vectors encoding fusion molecules comprising HDAg and at least 1 binding moiety, classified in class 536, subclass 23.4.
- XXVI. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:10, classified in class 530, subclass 350.
- XXVII. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:12, classified in class 530, subclass 350.

- XXVIII. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:13, classified in class 530, subclass 350.
- XXIX. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:14, classified in class 530, subclass 350.
- XXX. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:21, classified in class 530, subclass 350.
- XXXI. Claims 16 and 20, drawn to a polypeptide encoded by SEQ ID NO:23, classified in class 530, subclass 350.
- XXXII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:1, classified in class 530, subclass 350.
- XXXIII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:2, classified in class 530, subclass 350.
- XXXIV. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:3, classified in class 530, subclass 350.
- XXXV. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:4, classified in class 530, subclass 350.
- XXXVI. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:5, classified in class 530, subclass 350.
- XXXVII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:6, classified in class 530, subclass 350.

- XXXVIII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:7, classified in class 530, subclass 350.
  - XXXIX. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:8, classified in class 530, subclass 350.
  - XL. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:11, classified in class 530, subclass 350.
  - XLI. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:15, classified in class 530, subclass 350.
  - XLII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:16, classified in class 530, subclass 350.
  - XLIII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:17, classified in class 530, subclass 350.
  - XLIV. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:18, classified in class 530, subclass 350.
  - XLV. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:19, classified in class 530, subclass 350.
  - XLVI. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:20, classified in class 530, subclass 350.
  - XLVII. Claims 17 and 21, drawn to polypeptide encoded by SEQ ID NO:25, classified in class 530, subclass 350.

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- XLVIII. Claims 41-45, drawn to methods of enhancing the interaction between binding partners, classified in class 435, subclass 7.1.
- XLIX. Claims 46-51, drawn to methods of delivering molecules to a cell, classified in class 514, subclass 44.
- Claims 52-54, drawn to methods of amplifying a signal, classified in class 436, subclass 537.
- LI. Claim 55, drawn to a method of facilitating substrate exchange, classified in class 435, subclass 7.72.
- LII. Claims 56-57, drawn to methods of enhancing a reaction between binding partners, classified in class 435, subclass 962.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-XLVII are separate and distinct from each other as they comprise completely differing biochemical and physical entities having differing properties and uses. Invention I, II and XXVI-XLVII are each drawn to different polypeptides/fusion molecules, whereas Inventions III-XXV are each drawn to differing nucleic acids, vectors and host cells.

Inventions XLVIII- LII are each separate and distinct as they are drawn to differing methods having different steps and leading to differing results.

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Inventions I, II and XXVI-XLVII are each related to Inventions XLVIII-LII as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the compounds of Invention I, II and XXVI-XLVII can be used in other methods such as immunization or antibody production.

Inventions III-XXV are each related to Invention XLIX as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the compounds of Inventions III-XXV can be used in other methods such as recombinant polypeptide production

Inventions III-XXV are each separate and distinct from Inventions XLVIII, L, LI and LII as the nucleic acids, vectors and host cells of Inventions III-XXV cannot be used in the methods of Inventions XLVIII, L, LI or LII.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and the separate searches required, restriction for examination purposes as indicated is proper.

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Groups that differ only by the SEQ ID NO: recited are distinct and separate invention

since there is no evidence of relatedness or common structure and do not constitute an election of

species

Applicant is advised that the reply to this requirement to be complete must include an

election of the invention to be examined even though the requirement be traversed (37)

CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the

inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently

named inventors is no longer an inventor of at least one claim remaining in the application. Any

amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the

fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Robert A. Zeman whose telephone number is (703) 308-7991. The examiner

can be reached between the hours of 7:30 am and 4:00 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, Donna Wortman, Primary

Examiner can be reached at (703) 308-1032 or the examiner's supervisor, Lynette Smith, can be

reached at (703)308-3909.

Robert A. Zeman

May 4, 2001

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